Chester Public Utility District

Chester, Plumas County, CA

Sanitary Sewer Management Plan

June, 2019

Introduction

This introduction section provides background information on the purpose and organization of the Sewer System Management Plan (SSMP) and provides a brief overview of the Chester Public Utility District (CPUD) service area, sewer collection system and related facilities.

## SSMP Requirement Background

The SSMP has been prepared in compliance with the requirements of the Central Valley-Regional Water Quality Control Board (CV-RWQCB) pursuant to the California Water Code. The CV-RWQCB has mandated that the CPUD prepare a SSMP following the guidelines in the SSMP Development Guide. The CPUD is also required to comply with the Sanitary Sewer Overflow (SSO) electronic reporting requirements.

## Document Organization

This SSMP is intended to meet the requirements of both the CV-RWQCB and the statewide GWDR. The organization of the document is consistent with the CV-RWQCB and SWRCB requirements. This SSMP includes twelve elements, as listed below. Each of these elements forms a section on this document.

1. Goals

2. Organization

3. Legal Authority

4. Operations and Maintenance Program

5. Design and Construction Standards

6. Overflow Emergency Response Plan

7. Fats, Oils, and Grease (FOG) Control Program

8. Sewer System Evaluation and Capacity Assurance Plan

9. Monitoring, Measurement and Program Modifications

10. Internal Program Audits

11. Public Communication Program

12. SSMP Final Completion and Certification

## District Service Area and Sewer System

The CPUD is classified as a Special District. It is located in Plumas County. The CPUD provides sewer service to a community that lies solely within its sphere of influence. The population of Chester is approximately 2,500 people. There are approximately 1250 sewer connections, consisting of residential and commercial.

The CPUD sewer collection system consists of approximately 18-miles of pipe, ranging from 6 inches to 10 inches in diameter; 7-miles of service laterals (1250 sewer connections), 180 manholes and four, sewer lift stations. Treatment consists of six waste stabilization ponds (approximately 35-acres of total surface area) connected in series, relying on evaporation, transpiration, aeration, disinfection followed by four wetland ponds for treatment, prior to discharge into Lake Almanor when necessary. The CPUD does not receive sewage from other areas.

The CPUD operates and maintains its own sewer system and occasionally relies on contract maintenance, such as cleaning and CCTV. The CPUD has prepared its own SSMP with assistance from the California Special District Association and Rural Water Association..

Section 1: Goals

This part of the SSMP identifies the goals the CPUD has set for the management, operation and maintenance of the sewer system.

## Regulatory Requirements for Goals Element SWRCB Requirements:

The collection system agency must develop goals to properly manage, operate and maintain all parts of its wastewater collection system in order to reduce and/or prevent Sanitary Sewer Overflows (SSO’s), as well as to mitigate any SSO’s that may occur.

## Goal Discussion

The mission of the CPUD is to provide safe, responsive and reliable sewer service to the community. In support of this mission, the CPUD has developed the following goals for operation and maintenance of its sewer system:

1. To minimize any sanitary sewer overflow (SSO)
2. To prevent public health hazards
3. Minimize inconveniences by responsibly handling interruptions in service
4. Protect the investment in the collection system by maintaining adequate capacities and extending the useful life span of the system
5. Prevent any unnecessary damage to public and private property
6. Use funds available for sewer operation in the most efficient manner and to establish a capital improvement fund for the sewer system, as part of the rate program
7. Convey wastewater to ponds with a minimum of infiltration, inflow, and/or exfiltration.
8. Provide adequate capacity to convey peak flows
9. Perform all operations in a safe manner to avoid personal injury and property damage

Section 2: Organization

This section of the SSMP identifies Chester PUD staff that is responsible for implementing this SSMP, responding to SSO events, and meeting the SSO reporting requirements. This section also includes the designation of the Authorized Representative to meet SWRCB requirements for completing and certifying spill records.

## Regulatory Requirements for Organization Element

## SWRCB Requirement:

The collection system agency’s SSMP must identify:

1. The name of the responsible or authorized representative;
2. The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. Include lines of authority as shown in an organization chart or similar document with a narrative explanation.
3. The chain of communication for reporting SSOs, from receipt of a complaint or other information including the person responsible for reporting SSOs to the State and Regional Water Quality Control Boards and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, and/or State Office of Emergency Services (OES).

## Organization Discussion

This section discusses the organization and roles of sewer staff, the authorized representative to the SWRCB, and key staff responsible for implementing and maintaining the SSMP.

## Description of General Responsibilities

Wastewater Operator and/or Maintenance Operator:

Plans, organizes, directs, performs and supervises all work activities of the Chester Public Utility District. The Wastewater Operator and/or Maintenance Operator will advise the Board of Directors for the Chester Public Utility District of public works and/or of engineering matters. The wastewater operator and/or maintenance operator will prepare the budget while the board of directors will approve the budget. The operators will prepare cost estimates and obtain approval of the board of directors for all impending public work other than normal repairs and maintenance. The wastewater operator and/or maintenance operator will aid contractors with plans and specifications for public work projects if approved by board of directors.

Wastewater Operator and/or Maintenance Operator:

Plans, organizes and supervises the maintenance and repairs of sewer infrastructure. Said operators will also make recommendations to the Board of Directors regarding maintenance, constructions, and operations aspects. Said operators will also confer with contractors, engineers, and members of the general public on construction and maintenance problems and procedures.

Wastewater Operator and/or Maintenance Operator:

Operators are responsible for plant operations, collection system maintenance and will supervise sewer maintenance workers. The operators schedules work assignments, maintains records of assigned projects, supplies and equipment. The operators also investigate sewer-related complaints from the general public and prepare estimates for needed equipment and equipment maintenance.

Wastewater Operator and/or Maintenance Operator:

Will work as a member of a field maintenance crew to clean, unplug, and repair sewer lines and inspect lift stations. The operators will also locate and raise manholes, and operate power equipment. The operators are responsible for scheduling sewer cleaning with outside contractors upon board approval. Operators will be first responders who will be responsible for Underground Service Alerts.

Wastewater Operator and/or Maintenance Operator:

Responsible for maintaining written documentation of all public works records, maintenance schedules and regulatory reports.

Authorized Representative:

The Chester Public Utility District authorized representative in all wastewater collection system matters is the certified wastewater operator. The certified wastewater operator is authorized to certify electronic spill reports submitted to SWRCB. The maintenance operator is authorized to act in the certified wastewater operators’ absence. The certified wastewater operator is authorized to submit SSO reports to the appropriate government agencies.

Responsibility for SSMP Implementation:

The certified wastewater operator is responsible for implementing and maintaining all elements of this SSMP.

SSO Reporting Chain of Communication with names and phone numbers

1. Clinton Tissot/ Lead Supervisor

Work Phone 530-258-2171

Emergency Contact 530-816-0994

1. Allan Homme/ field Supervisor

Work Phone 530-258-2171

Emergency Contact 530-592-8052

1. Liam Bengaard/ OIT/Maintenance

Work Phone 530-258-2171

Emergency contact 530-258-7893

 4. Plumas County Health Dept. Chester

 A. (530)258-2536

 5. Emergency Services

 A. (530-283-6332) Office

6. State Water Resources Control Board, Central Valley Region (530-224-4845)

7. Office of Emergency Services, State of California (800) 852-7550

See attached flow chart of SSO procedures

Overflow Response Procedures

The overflow response procedure presents a plan for CPUD to mobilize labor, materials, tools and equipment to correct or repair any condition that may cause or contribute to an un-permitted discharge.

1. Receipt of information regarding an SSO ;

 An employee or a CPUD Board member may receive the information of an SSO. Employees and Board members accept after hours calls.

1. The person who receives the SSO call should obtain all relevant information available regarding the overflow including the following.
2. Time and date call received
3. Specific location
4. Description of problem
5. Time overflow was noticed by caller
6. Callers name and phone number
7. Observations of caller; odors, duration and back or front of property or street
8. Any other information that will assist crews to locate and stop the overflow quickly
9. Person taking call will then immediately dispatch information to proper person(s) to take remedial action to resolve the SSO problem.

Chester Public Utility District Organizational Chart with names and Phone numbers:

2019 Members of the Board of Directors

Ben Thompson, Home: 258-3364

Staff Members

Frank Motzkus, General Manager

Clint Tissot, Lead Supervisor

Allan Homme, Field supervisor

Liam Bengaard, OIT

Cheryl Johnson, Office Manager

Kelly Sanders, Secretary

Organization Chart for Chester Public Utility District

Wastewater

Operator(s)

General

Manager

5 Member Board of Direction

Section 3: Legal Authority

## Regulatory Requirements for Legal Authority Element

Each Waste Water Collection System Agency (CPUD) must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

* Prevent illicit discharges into its sanitary sewer system (examples may include storm water, chemical dumping, unauthorized debris, and cut roots, ECT.);
* Control infiltration and in flow from satellite collection systems and laterals;
* Require that sewer and connections be properly designed and constructed including all new and rehabilitated sewer systems and connections;
* Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the CPUD;
* Limit the discharge of fats, oils and grease and other debris that may cause blockages;
* Enforce any violations of it sewer ordinances;

Appendix A: Ordinance No. 4

Ordinance Governing the

 Chester Public Utility District

 Sewer Collection System

Sanitary Sewer Management Plan (SSMP)

Section 1

 Whereas, this Ordinance requires that any new construction or rehabilitation to the existing sewer collection system must adhere to the building and construction standards and specifications adopted in 1976 by the Chester Public Utility District, referred to further as CPUD, or District, and periodically updated to conform to new regulations and standards.

 And, whereas this Ordinance is intended to be a supplement to Ordinance No.3, adopted July 6, 1971 by the Chester Public Utility District Board of Directors, which provides for the establishment of rules and regulations concerning District Sewer Service and Charges

 Therefore, be it ordained by the Chester Public Utility District Board of Directors that all construction, maintenance, and/or rehabilitation must be in compliance with the Construction Standards adopted by the District.

 It is further ordained that the CPUD must be notified prior to any new construction or rehabilitation to said sewer system prior to commencement or work, and that the District shall inspect all works for approval, or rejection if it does not meet the said standards.

Section 2

Whereas, this ordinance defines that the CPUD is responsible for all maintenance and repair to the sewer collection system from the point of connection of the customers lateral at the sewer main up to the property line, sometimes identified with a cleanout box. The customer is responsible for any and all repairs or maintenance to the private lateral sewer line from the home or business to the property line.

 Therefore, it is ordained that the CPUD Board of Directors or its affiliates has the authority to impose fines upon the customer to include all labor, parts, or other costs to maintain or repair any customer owned laterals, as well as for any costs or expenses incurred in the process of collecting such fine and costs, as result of a system breach or failure that has not been resolved by the customer within 72 hours of being aware of said breach or failure, to include proper notification to the District of such breach or failure and what precautions or repairs have been arranged or completed adhering to the standards of the District.

Section 3

 Whereas, this ordinance defines that in regards to infiltration and inflow it is prohibited to release any sewage, including gray water, into the CPUD collection system other than by a legal connection with the system.

 Therefore, let it be known that the only authorized items to be flushed will be Human Waste and bio-degradable toilet paper.

Section 4

 Whereas, this ordinance defines that it is prohibited to release fats, oils, and greases, diapers, disposal diapers, clothing or other non-degradable objects that may cause blockages in the CPUD sewer collection system.

 Whereas, it is ordained that the CPUD Board of Directors or its affiliates have the authority to impose fines for any such violation of any part of this ordinance, and to include costs for collections of said fines. Failure to comply with this ordinance may result in the termination of services from the District to the violating customer.

This Ordinance shall take effect thirty days after its passage.

The foregoing Ordinance was adopted at a regular Board meeting of the Board of Directors of the Chester Public Utility District, held on: October 9th , 2012, by the following vote:

Ayes: \_4\_\_ Nay: \_\_0\_ Absent: \_1\_\_ Abstaining: \_0\_\_

Approved by: Copy on file at CPUD Office

Chairperson, Board of Directors:

Tonu Plakk

Attested by: Copy on File at the CPUD Office

District Secretary: Cheryl Johnson

Date: October, 9th, 2012

Section 4: Operations and Maintenance

## Section 4a: Collection System Map

Requirements: Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and storm-water pumping and piping facilities, if applicable.

## Section 4b: Preventative Operation and Maintenance

Requirements: Each wastewater facility shall describe routine preventative operations and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance Program should have a system to document scheduled and conducted activities, such as work orders.

## Preventative Root Maintenance Program

The continual flow of nutrient-filled water found in sewer pipes attracts tree roots. Roots growing along the pipes can exert significant pressures on pipes, and roots pushing into and around gasket connection points expand in a radial manner and break seals.

Root infiltration can cause a blockage to the lateral and the sewer line servicing your home or business, resulting in sewage backup into your home or business and damage to your furnishings.

Homeowners and businesses are responsible for maintaining the lateral that services their home or business from the street right-of-way to their home or place of business. CPUD is responsible for laterals from the main line to the right-of-way line.

The conventional method of removing roots by cutting or tearing is used to solve an immediate problem or stoppage, but this method does not retard the growth or destroy the roots outside the pipe. This is similar to pruning the bushes and shrubs surrounding your residence.

An annual chemical root control program can be an effective preventive maintenance measure. Products containing copper sulfate or metam sodium should be avoided, as both are harmful to the environment and to the natural bacteria, which normally decomposes dead roots.

A product that foams with the addition of water is the most effective means of coating the roots and pipe surfaces. The product approved for our type of system is called Root-X. Root-X is a non-evasive chemical that retards root growth for a minimum of 12 months, and does not harm the tree or plant. This chemical treatment is a powder that turns to foam when contact with water is made. The product has a very low impact rate and will not affect the ability of the stabilization ponds to function as designed.

The CPUD staff is considering implementing an annual preventive maintenance program wherein they will clean trouble spots as they are identified and treat the sewer mains with a foaming root killer. Every year ½ of the system will be treated along with any identified hot spots. The estimated cost per year to perform this maintenance will be approximately $5,000.00 in materials, and 40 labor hours.

In those areas where root intrusion becomes so prevalent that they cannot be eradicated with chemicals, because of the deteriorated condition of the sewer line, the affected segment of the pipe will be replaced.

## Fats, Oils and Grease (FOG) Program

Chester PUD does have commercial/business properties hooked into the sewer system. CPUD has implemented the following FOG program. All customers will be supplied with information on the proper disposal of FOG related items, and have been advised of the possible damage that can be caused if these items are improperly disposed of into the sewage system.

CPUD is considering as a preventative maintenance program, bi-annually introducing an environmentally friendly degreasing agent into the main sewage lines in order to inhibit major FOG related blockages and SSO’s. CPUD will introduce these agents at the manholes directly into the sewer system at designated areas so that they travel through the entire collection system providing the best possible coverage.

## Pipeline Cleaning Program

CPUD performs an annual maintenance on the sewer lines throughout the entire system. This includes a visual inspection at manholes, camera inspection when appropriate, and the use of an approved degreasing agent introduced into the pipeline for cleaning.

CPUD contracts with a service provider to have the pipelines cleaned, inspected, and/or pressure washed when the need arises.

CPUD maintains records of all system repairs either scheduled or emergency at the office. These records are used to identify possible problem areas in the system, as well as potential problems. These records are also used in order to maintain compliance with regulatory agencies.

## Camera Monitoring Program

CPUD utilizes a closed-circuit camera to inspect the pipelines if problems are identified that may be resolved through this technology. This process includes the use of a camera system to monitor and identify areas of the system in need of repair or replacement. Camera inspection allows for preventative maintenance to be performed lessening the need for emergency maintenance and possible SSO issues. The proposed inspection program consists of a rotating schedule of monitoring. The rotation will occur over a 2-3 year period where a portion of the system will be monitored by the camera system, with the system being scheduled for the next camera session every 5 years. Any areas deemed a potential problem area or where a problem has been identified will be assigned a work order and CPUD staff will repair or replace the affected portion of the system. All records of this maintenance will then be documented and kept on file.

## Chart to identify nature and quantity of debris removed during cleaning.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Nature and Quantity of Debris Removed during Cleaning Type of Debris**  | **Clear (no debris)**  | **Light**  | **Moderate**  | **Heavy**  |
| Sand, grit, rock  | CLR  | DL  | DM  | DH  |
| Grease  | CLR  | GL  | GM  | GH  |
| Roots  | CLR  | RL  | RM  | RH  |
| Other (specify)  | CLR  | OL  | OM  | OH  |

## Lift Station Preventative Maintenance Program

CPUD performs annual preventive maintenance and cleaning of the two lift stations in the system. Maintenance includes pressure washing the wet wells, visual inspections of the lift station and all equipment, and documenting any potential problems or damage requiring repair or replacement. Work orders will then be issued and CPUD staff will repair or replace the affected portions of the lift stations. All records of this maintenance will then be documented and kept on file. A SCADA telemetry system records the duration of operation and the pumping amounts on a continual basis. The CPUD staff is therefore immediately alerted of any unusual changes in the operation of the lift stations.

## System Blind Spots

There are no; quote: “blind spots” in the CPUD sewer collection system where an SSO could go unnoticed for any length of time. There are several locations where sewer lines cross private property where an SSO may go unnoticed by District staff; however, private citizens and/or the home/business owners would obviously notice the problem and alert the District staff accordingly.

## Work Order System

A work order system is being implemented to allow for documentation and the tracking of progress and potential hot spots within the system. A work order will be written for all repairs and maintenance done on the system prior to work being completed, with an exception existing in case of a system emergency where a work order will be written after the initial emergency has concluded or all repairs have been completed.

Work order records will be used to determine how much of the system was cleaned, repaired, or replaced during a year. The records will also identify the exact location of all work completed on the collection system and will identify those areas affected more often than others.

## Customer Complaints

The CPUD takes all complaints from customers very seriously. In case of a complaint, a work order will be issued to allow CPUD staff to investigate the nature of the complaint. The results of this investigation will remain documented at the office. In the case that there is no identifiable problem, this will be documented on the work order and kept on file. If a problem is identified CPUD staff will work to promptly resolve the problem. If the problem is identified in an area not property of the CPUD, the homeowner or business owner will be advised of the problem and will be advised on the procedures to follow to resolve the problem. If a homeowner does not resolve the problem within a reasonable time the CPUD will perform or have performed the necessary remedy. All costs including labor, materials, permits, and administration fees will be charged back to the home or business owner. If the owner refuses to pay the cost, legal action and possible termination of services provided by the CPUD may be pursued to resolve the debt incurred to the District.

## Section 4c: Rehabilitation and Replacement Plan

Requirements: Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual inspection and TV inspections of manholes and sewer pipes, and system for ranking the conditions of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure. The plan shall include a time schedule for implement the short-term plans plus a schedule for developing the funds needed for the capital improvement plan.

## Rehabilitation and Replacement Plan

CPUD infrastructure has been, in the past, a concern of the district and the RWQCB because of excessive infiltration and inflow (I&I). The District has been eliminating some of the more easily identifiable sources of I & I. However, the sewer replacement plan is on-going and CPUD implemented a repair/rehabilitation and replacement program to address the needs to update, repair and replace those components of the sewer collection system that no longer function at the highest levels of efficiency. The repair plan consists of a three component program beginning with system inspection and evaluation repair and rehabilitation, and finally follow-up. The program establishes two categories; 1) long-term projects and; 2) short term projects. Short term projects will include the actual time to perform the evaluation of the system in the determined areas to identify the extent of any needed repairs, replacement and rehabilitation. In cases where the evaluation shows no needed response the area will documented as clear and the next designated area will then be addressed. Short term projects will be determined by financial impact on the district, if the yearly allotted budget will not allow for the cost of a determined repair it will be deemed a long-term project. Long-term projects will be deemed any project requiring funds more than the allotted amount in the yearly budget for repair and maintenance. These will include any rehabilitation or repair that will require the use of finances from an outside source or from future revenues to complete the said project. Capital improvements will be addressed as long-term projects. To assist in funding future long-term projects Capital Improvement Accounts have been set-up in the sewer rate structure for each major long term project to aid in financing future projects. The final step of the rehabilitation and replacement plan will be to continually reevaluate areas after rehabilitation has been completed to get an estimate on time of service for all repaired or replaced materials to allow for proper maintenance, upkeep, and a estimated time that future repair or replacement may need to take place. It will allow the District to see from start to completion the time necessary to make such repairs or replacements, and will allow for better estimates for funds needed to continue such projects. It will also allow the district to evaluate the effectiveness of repairs and replacements in order to assure the efficiency of the system as a whole. Having a sewer system that operates as efficiently as possible is the Districts primary goal.

**Section 4d: Training**

## Requirements: Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require all contractors to be appropriately licensed and skilled.

It is the policy of Chester Public Utility District to train employees on all equipment used according to manufactures recommendations. The CPUD has a safety manual that is included with this portion of the SSMP. Each Employee is required to read the manual within 24 hours of hire date and/or before use of any equipment. Each employee must complete the courses listed below prior to engaging in any of the activities.

Specific training classes are conducted from time to time by an outside agency.

1. Confined space
2. Excavation/trenching
3. Lock-out/Tag-out
4. Wastewater/Blood borne pathogens
5. Personal Protective Equipment
6. Hazardous Materials
7. Sewer Standards
8. Traffic Safety

## Section 4e: Contingency Equipment and Replacement Inventories

## Requirements: Provide equipment and replacement part inventories, including identification of critical replacement parts.

The Chester Public Utility District is considered a relatively small sewer system. Consequently it does not necessarily stock all replacement parts but can easily obtain needed parts from local vendors within a twenty four hour period. Attached is a stock replacement plan for items the District does keep in inventory.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  | **EQUIPMENT** |  |  |  |
|  |  |  |  |  |  |
| **Equipment Name** | **Date Purchased** | **Original Cost** | **Expected Replacement Year** | **Replacement Cost** |  |
|  |  |  |  |  |  |
| 2017 Ford F-250  | 2017 |  20,316 |  2027  |  20,000 |  |
| Big Tex utility trailer  | 2018 | 2,335.12 | N/A | 2,300  |  |
| Case tractor/backhoe | 2009 | 30,000 | 2022 | 30,000 |  |
| 2009 Ford F250 PU | 2003 | 30,000 | 2020 | 30,000 |  |
| 2003 Ford F250 pu | 2002 | 27,511 | 2015 | 25,000 |  |
| 2002 Chevy 2500 utility truck | 2007 |  | 2020 |  |  |
| 2007 Dump trailer | 2008 | 3,000 | 2018 |  |  |
| 500 gal water trailer | 2010 | 47,000 | 2029 |  |  |
| Obrien Sewer Jet Trailer | 1989 |  | 2020 |  |  |
| Sewer Rodding machine Trailer | 1994 | 11,000 |  | 11,000 |  |
| Whisperwatt Generator | 1994 | 11,000 |  | 11,000 |  |
| Whisperwatt Generator | 2010 | 5,000 | 2025 | 5,000 |  |
| Sewer Camera | 2007 | 3930.71 | 2025 | 4200.00 |  |
| Thompson Pump | 1999 | N/A | N/A | N/A |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Section 5: Design and Construction Standards

## Section 5a: Standards for Installation, Rehabilitation, and Repair

Requirements: The SSMP must identify the design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems.

## Introduction

The CPUD adopted design and construction standards and specifications in 1972 for sewer system components. They are used by the CPUD staff and are communicated to consulting engineers and/or developers at the start of a design process or proposed development. These Standards and Specifications have been updated from time to time as new technology or construction materials are approved and accepted for use by various State and Federal agencies.

## Regulatory Requirements for the Design and Performance Provisions Section

The regulatory requirements for the Design and Performance Provisions section are:

## RWQCB Requirement (Design and Construction Standards):

a. Standards for Installation, Rehabilitation and Repair

Each wastewater collection system agency shall identify minimum design and construction standards and specifications for the installation of new sewer systems and for the rehabilitation and repair of existing sewer systems.

b. Standards for Inspection and Testing of New and Rehabilitated Facilities

Each wastewater collection system agency shall identify procedures and standards for inspecting and testing the installation of new sewers, pump stations, and other appurtenances; and for rehabilitation and repair projects.

## GWDR Requirement (Design and Performance Provisions):

(a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and

(b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

## Construction Standards

The CPUD’s Construction Standards and Specifications are as specified in the CPU*D Standard Construction Specifications and Details for Water and Sewer Facilities*, Adopted, 1972.

## Section 5b: Standards for Inspecting and testing of new, rehabilitated, and repaired facilities.

The processes for testing and inspecting of new rehabilitated or repaired facilities are available within the Districts adopted Construction Standards. As written into the standards testing and inspection shall be performed by the contractor in compliance with the Construction Standards and will be monitored by the District or its contracted Engineer to assure compliance has been achieved.

Section 6: Overflow Emergency Response Plan

6.1

Requirement: Each Enrollee shall develop and implement an overflow emergency response plan that includes measures to protect public health and the environment. At a minimum, this plan must include the following:

1. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
2. A program to ensure an appropriate response to all overflows;
3. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g., health agencies, Regional Water Boards, water supplies etc) of all SSOs that potentially affect public health or reach water of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Laws, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
4. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
5. Procedures to address emergency operations, such as traffic and/or crowd control and other necessary response activities; and
6. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharged.

6.2

Procedure to handle reports of sewer overflow:

1. Receipt of information regarding an SSO;

Any employee or a CPUD Board member may receive the information of an SSO. Employees and Board members receive after hours calls.

1. The person who receives the sewer call should obtain all relevant information available regarding the overflow including the following:
2. Time and date call received
3. Specific location
4. Description of problem
5. Time overflow was noticed by caller
6. Callers name and phone number
7. Observations of caller; odors, duration and back or front of property or street
8. Any other information that will assist crews to locate and stop the overflow quickly
9. Person taking call will then immediately dispatch information to the proper person to handle the situation
10. The person designated (wastewater operator and/or maintenance operator) will then go through the following process;
11. Determine cause of and amount of overflow
12. If a pump malfunction is determined to be the cause at a lift station the designated person is to call: RWQCB
13. Block storm drain if needed
14. Push as much of the spill back into man hole or lift station
15. If need be use trash pump to pump spilled sewage back into manhole or lift station.
16. As soon as possible pull sewage pump and repair or replace
17. Hose area down towards lift station and disinfect
18. If spill occurred because of a blockage in the main line;
19. Attempt to unclog line with snake, if not possible-
20. Expose main and replace pipe
21. Follow clean up instructions above
22. If spill occurred at sewage pond area;
23. Determine cause and amount of overflow
24. If determined to be a valve problem, replace valve
25. If determined to be an overflow pipe clog, clean pipe
26. Follow Sanitary Sewer Overflow Reporting Process

Sanitary Sewer Overflow Reporting Process

Start

Is the SSO equal to or greater than 100 gallons?

 No

Yes

Is the SSO equal to or greater than 1000 gallons?

 Yes

No

 Yes

Within 2 hours, report the SSO to the Regional Water Board and Cal EMA

Did the SSO imminently and substantially endanger human health?

No

 Yes

Did the SSO cause fish kill?

No

 Yes

Within 10 days, report the SSO to the Regional Board using the web based reporting system

Was the SSO caused by a problem in or with a sewer line owned by CPUD?

No

Was the SSO caused by a problem in a service lateral owned by CPUD?

 Yes

No

Include the SSO in the annual report to the SWRCB due on the 15th of the month

Optional-Report SSO from a private property owner by logging on through Public Domain of the web-based SSO reporting system. If desired or instead of: telephone Regional Board with information

Section 7: Fats, Oils and Grease Control Program

Requirements: Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed the Enrollee must provide justification as to why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged into the sanitary sewer system. This plan shall include the following as appropriate:

* 1. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
	2. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
	3. The legal authority to prohibit discharges of FOG into the system and identify measures to prevent SSO’s and blockages caused by FOG;
	4. Requirements to install grease removal devices (such as traps or interceptors),design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
	5. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG program;
	6. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance for each section, and
	7. Development and implementation of source control measures for all sources of FOG discharged into the sanitary sewer system for each section identified in (f) above.

## The CPUD has made it a priority to keep its customers informed on proper FOG disposal procedures. This has been done in the welcome letter received upon moving into the CPUD service area, as well as through occasional reminders in a monthly newsletter sent out with the billing to each customer.

The CPUD has the legal authority to enforce the implemented FOG program through Ordinance No. 3, Section: II (f), adopted July 15, 1971, and Ordinance No., adopted, 2012.

## Fats, Oils and Grease (FOG) Program

CPUD does have commercial properties hooked into the sewer system: (i.e. restaurants, schools and businesses). CPUD has implemented the following FOG program. All customers will be supplied with information on the proper disposal of FOG related items, and have been advised of the possible damage that can be caused if these items are improperly disposed of into the sewage system.

CPUD is considering as a preventative maintenance program, to bi-annually introduce an environmentally friendly degreasing agent into the main sewage lines in order to prevent major FOG related blockages and SSO’s. CPUD will introduce these agents at various upstream manholes directly into the sewer system so that the degreasing agent will travel through the entire system allowing for the best possible coverage.

Section 8: System Evaluation and Capacity Assurance Plan

# Introduction:

This section of the SSMP outlines the District’s programs and activities to provide adequate capacity.

# Requirements:

The Enrollee shall prepare and implement a capital improvement plan that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

* 1. Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSO’s that escape the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacities) and the major sources that contribute to the peak flows associated with overflow events.
	2. Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
	3. Capacity Assurance Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternative analysis, and schedules. The CIP may include increase in pipe size, I/I reduction, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
	4. Schedule: The Enrollee shall develop a schedule of completion dates for all portions (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D.14.

## Evaluation-Collection System Master Plan

The CPUD has completed an assessment of the capacity of its current infrastructure. The system is adequate to handle the current dry and wet weather sewage flows, including inflow and infiltration. This is now evident because of the reduction in I&I which was achieved as a result of the extensive repair/rehabilitation program implemented several years ago. The CPUD requires, as part of the design criteria to be included in the requirements of any contractor wishing to build within the communities’ jurisdiction, the need to verify, and/or increase, the capacity of the infrastructure to maintain compliance with this SSMP and any other state regulations.

##  Evaluation-Hydraulic Model

The CPUD continually compiles data in order to maintain a hydraulic analysis of the sewer system. The CPUD monitors the flow rate of the system at the headworks of the treatment.

The data compiled in the Hydraulic analysis shows that the current system which is now relatively free from infiltration has adequately handled the flow throughout the entire monitoring period with no known periods of increase or decrease that has not been subsequently backed up by the water usage or identified mechanical malfunction in the same system.

One major improvement that has substantially eliminated excessive domestic flows into the collection system is the installation of water meters on all connections. Additionally, the adoption and implementation of a revised metered water rate has caused the residents to re-evaluate their wasteful water usage and its disposal into the sewer collection system.

##  Design Criteria

The capacity-related design criteria are included in Section 5 of the SSMP, Design and Performance Provisions.

##  Capacity Enhancement Measures-Capital Improvement Program

The CPUD requires that contractors, and/or developers, desiring to build within the communities’ jurisdiction will, if deemed applicable, be required to increase the capacity of the current infrastructure to maintain the standards of this SSMP and any other state regulations. There are no known deficiencies currently noted within the system. Future enhancements will be documented within the CPUD Capital Improvement Plan if a need is determined. There are no projects planned in the foreseeable future to expand or replace portions of the sewer system. The design criteria and requirements must be agreed upon by any private contractor wishing to build in the community prior to their projects actually being approved by the CPUD.

## Hydraulic Model in Excel

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Jul-08 | 8-Aug | 8-Sep | 8-Oct | 8-Nov | 8-Dec | 9-Jan | 9-Feb | 9-Mar | 9-Apr | 9-May | 9-Jun |
| 1.1 | 1.2 | 1.4 | 1.3 | 1.3 | 1.4 | 1.3 | 1.1 | 1.2 | 1.1 | 1.1 | 1.2 |


##  Schedule

The CPUD will place any publicly funded enhancements to the infrastructure of the current system in the Capital Improvement Plan if a need is determined. At this point no known deficiencies have been found to identify a need to be scheduled.

Section 9: Monitoring, Measurements, and Program Modifications.

## Introduction:

This section of the SSMP outlines the process that the CPUD will follow to evaluate the effectiveness of the SSMP and to identify updates that may be needed for a more effective program.

Requirements:

The Enrollee Shall:

1. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
2. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
3. Assess the success of the preventative maintenance program;
4. Update program elements, as appropriate, based on monitoring or performance evaluations; and
5. Identify and Illustrate SSO trends, including; frequency, location and volume.

## Performance Measures

The indicators that the CPUD will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are:

* + - Total number of SSOs;
		- Number of SSOs by each cause (roots, grease debris, pipe failure, capacity, pump station failures, and other);
		- Portion of sewage contained compared to total volume spilled;
		- Volume of spilled sewage discharged to nearby surface water; and
		- Planned to actual performance for preventive maintenance.

## Baseline Performance

The CPUD has limited historical, or baseline, performance data for the selected performance measures. The data that is available is shown in the following charts. Trends will be added when the quantity of data is adequate.

|  |  |  |  |
| --- | --- | --- | --- |
| Calendar Year | Gravity Sewer SSO’s | Pump Station SSO’s | Force Main SSO’s |
| 2008 | 0 | 0 | 0 |
| 2009 | 0 | 0 | 0 |
| 2010 | 0 | 0 | 0 |
| 2011 | 1 | 0 | 0 |

## Performance Monitoring and Program Changes

The CPUD will evaluate the performance of its wastewater collection system at least annually using the performance measures identified in Subsection C, Performance Measures, above. The CPUD will update the data and analysis in this section at the time of the evaluation.

The CPUD may use other performance measures in its evaluation. The CPUD will prioritize its actions and initiate changes to this SSMP and the related programs based on the results of the evaluation.

Section 10: SSMP Audits

Requirements: As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSO’s. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee’s compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

Section 11: Public Communication Program

## Introduction

This portion of the SSMP outlines the process involved in communicating with interested members of the public regarding the development, implementation of and performance of this plan.

## Requirements

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communications system shall provide the public the opportunity to provide input to the Enrollees as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee’s sanitary sewer system.

## Communications during the SSMP Development and Implementation

The announcement of the SSMP was made at regular Board of Director meeting in conjunction with the Ordinance No. adopted, ?????2012.

## Communicating Sanitary Sewer Performance

The District will make information on the performance of its sanitary sewer system performance available for review. The performance information will include the performance indicators listed in Section IX of the SSMP; Monitoring, Measurement, and Program Modifications and will be compiled annually. Notice that the performance information is available for review will be posted on the District’s bulletin board at the District office 251 Chester Airport Road,Chester California. The Notice will be worded, as follows:

The most recent compilation of the District’s sanitary sewer maintenance plan information is available for review at 251 Chester Airport Road, during normal business hours. Interested parties can contact the District Secretary at (530) 258-2171 or email the District at cpud@frontiernet.net for additional information.

The District reports SSOs electronically to the California Integrated Water Quality System (CIWQS). The electronic SSO data, as well as information regarding regulatory actions, is available at: http://www.waterboards.ca.gov/ciwqs/publicreports.html.

The District will direct interested parties to the CIWQS public access website.

The District will report the performance of its sanitary sewer maintenance plan to the Board of Directors annually at regularly scheduled meeting and the performance information will be included in the minutes of that public meeting. The performance information will include the performance indicators listed in Section IX of the SSMP; Monitoring, Measurement, and Program Modifications and will be compiled annually.

## Agreements with Satellite Collection Systems

The CPUD does not use or have any satellite collection systems at this time. In the event that a change occurs adding a satellite collection system an agreement with the added party would be completed and kept on file with the District Office in compliance with all requirements set forth in the SSMP.

Section 12: SSMP Final Completion and Certification

Both the SSMP and the Enrollee’s program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and must be presented to the Enrollee’s governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general WDR’s within the time frames identified in the time schedule provided in subsection D.15

In order to complete this certification, the Enrollee’s authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box. Printing and signing the automated form, and sending the form to the State Water board.

The State’s SSO reporting site’s address is: https://ciwqgs.waterboards,ca.gov/

Appendix-Safety Precautions

**Table of Contents**

1. **General Safety Rules**
2. **Electricity**
3. **Floor Surfaces**
4. **Lifting and Moving Objects**
5. **Machinery and Equipment Safety Procedures**
6. **Guest Services**
7. **Hazardous Chemical Emergencies/Chemical Spills**
8. **First Aid**

**Section 1: GENERAL SAFETY RULES**

1. All newly hired employees will receive training on the safety manual within 10 days of employment.
2. Always follow directions, DO NOT take chances or short cuts.
3. If you don’t know ask, safety first.
4. Keep all work areas clean and clear of obstructions at all times
5. Report unsafe conditions or practices to your supervisor immediately, things cannot be addressed if they are not known.
6. Whenever you are involved in an injury or accident, regardless of however minor it may seem, report it immediately.
7. Get First Aid promptly when injured.
8. Use, adjust, and repair equipment only when authorized to do so.
9. Do not alter, or remove any installed safety devices.
10. Wear approved personal protective equipment (PPE) as directed.
11. Read and Follow all directions on labels and in operation manuals.
12. If you use chemicals, cleaning agents, or solvents, you are required to know and understand the MSDS (Material Safety Data Sheets) and where to find this information.
13. Always obey signs and posted instructions, they are there for a reason.
14. Listen carefully to your supervisor’s instructions. If you are not sure ask for help.
15. When working with another employee, make sure you know what the other employee is doing as well as letting them know what you are doing.
16. Notify everyone who might be in danger or in an unsafe environment due to the work being performed.
17. Never use improper or broken tools or equipment. Obtain the correct tool or have the broken one repaired or replaced to complete a job.
18. DO NOT obstruct aisles, emergency exits, walkways, streets, or traffic areas with cords, equipment, or materials, and a minimum 24” walkway must be maintained at all times.
19. When moving an item through an active area, verbally warn those around you of your approach and caution them to be aware of your activity.
20. Know where the nearest fire exit, extinguisher, and hydrant are at all times.
21. DO NOT take or allow others to take short cuts in, around, or through dangerous work areas.
22. When operating power equipment of any kind, caution should be exercised and proper safety equipment should be used.
23. Contact your supervisor immediately if a Hypodermic device is found. Never risk picking up the device without taking proper safe handling procedures, to include PPE and proper disposal containers.
24. Observe “WET FLOOR” signs and safe practices in hallways, restrooms, pump rooms, and work areas in general.
25. Never enter a confined workspace without a minimum of 3 persons present and following safe work area procedures.
26. Never go to a potentially dangerous work area by yourself without notifying the office or your supervisor and continually check-in to ensure your safety.
27. DO NOT work at the water’s edge without another person present.
28. DO NOT drive any vehicle if impaired or if the conditions are unsafe for the vehicles proper use.
29. When driving any vehicle follow all safety procedures and laws at all times.
30. Always return tools and equipment to its proper storage area after use.
31. Employees shall use proper lifting techniques as outlined in the Back Injury Prevention Procedure portion of this manual (Section 4)
32. Proper hygiene shall be used when leaving or returning to work areas for breaks or duties (i.e. hand washing)
33. Horseplay and running shall be forbidden.
34. No jewelry, long hair, or loose clothing shall be allowed around any machinery while operating.

**Section 2: Electricity**

1. Treat electricity with respect.
2. When plugging in an electrical cord make sure your hands are dry, to eliminate the possibility of shock.
3. Grasp the plug and not the cord when unplugging an electrical cord from any outlet.
4. Electrical equipment should be grounded with a 3-prong plug or a separate ground wire.
5. Electrical outlets near liquids (sinks, and other water sources) should be equipped with a GFI electrical outlet.
6. Never use electrical testing equipment unless properly trained to do so.
7. Use and follow proper Lock out/Tag out procedures when working on electrical equipment.

**Section 3: Floor Surfaces**

1. Floors shall be kept clean and dry.
2. Floor and platforms shall be kept free of projections, obstructions, holes, and loose boards or other material comprising of the floor covering.
3. Always clean the floor or work area surface after a spill, or deposit of waste water or solids has been present.
4. When working on any surfaces always wear appropriate footwear.
5. When mopping floors, always place a “Wet Floor” sign to alert others of possible slip hazards.
6. Always mark cords, hoses, or equipment lines by cones, tape, or holders to alert others of a possible trip hazard.
7. Always take extra precaution is work areas where conditions may change rapidly or are uncontrollable due to weather, or other circumstances.

**Section 4: Lifting and Moving Objects**

Improper lifting techniques are responsible for a large percentage of back injuries among workers.

Proper methods of lifting and handling protect against injury, and makes work easier.

You need to “**think**” about what you are going to do before bending to pick up an object. Over time, safe lifting techniques should become habit.

The following are the basic steps of safe lifting and handling:

1. Size up the load and check overall conditions. Don’t attempt the lift by yourself if the load appears to be too heavy or awkward. Check that there is enough space for movement, and that the footing is good. “Good Housekeeping” ensures that you won’t trip or stumble over an obstacle.
2. Make certain that your balance is good. Feet should be shoulder width apart, with one foot *beside* and the other foot *behind* the object that is to be lifted.
3. Bend at the knees, don’t stoop. Keep back straight, but not vertical. (There is a difference. Tucking the chin straightens the back.)
4. Grip the load with the palms of hands and fingers. The palms grip is much more secure. Tuck in the chin again to make certain your back is straight before starting to lift.
5. Use your body weight to start the load moving, and then lift by pushing up with the legs. This makes full use of the strongest set of muscles.
6. Keep the arms and elbows close to the body while lifting.
7. Carry the load close to the body. Don’t twist your body while carrying the load. To change directions, shift your foot position and turn your whole body.
8. Watch where you are going!
9. To lower the object, bend knees. Don’t stoop. To deposit the load on a bench or shelf, place it on the edge and push it into position. Make sure your hands and feet are clear when placing the load.
* Make it a habit to follow the above steps when lifting anything-even a relatively light object.
* TEAM LIFTING must be coordinated
* If the weight, shape, or size of an object makes the job much for one person, ask for help.
* Ideally, workers should be of approximately the same size for team lifting. One individual needs to be responsible for the control of the action to ensure proper coordination. If one worker lifts too soon, shifts the load, or lowers it improperly, either they or the person working with them may be injured.

LIFTING HEAVY OBJECTS

* Safe lifting of heavy items requires training and practice. For example, we’ve probably all seen a small person move heavy sacks with apparent ease. The secret lies in taking the proper stance and grip. When equipment is available, it should be used to lift and carry heavy objects. Loaders, forklifts, hoists, ect. Are made for this purpose.

Finally, some “DO’s” and “DON’Ts” of safe lifting and carrying.

DON’T:

Use your back muscles to do lifting.

Try to lift an item that is too heavy of awkward.

Twist your body while carrying an object.

Attempt team lifting without proper coordination.

DO:

Tuck in chin to keep the back as straight as possible while lifting.

Lift with the strong muscles.

Ask for help with heavy, awkward items.

When possible, use mechanical equipment to move heavy items.

**Section 5: Machinery and Equipment Safety Procedures**

**General:**

1. Use all safeguards provided. These safety devices are designed for your protection.
2. Report any missing safety guards to your supervisor immediately.
3. Work only equipment that you have been assigned to and that you have been trained on.
4. Inspect your equipment and be sure that it is safe to use before commencing operation.
5. DO NOT operate any equipment that you think is unsafe, and report it to your supervisor immediately.
6. DO NOT leave equipment unattended while it is in operation.
7. DO NOT oil, or repair the equipment or machinery unless you have been trained and have been authorized to do so.
8. DO NOT make any electrical repairs unless qualified to perform these tasks. If you are qualified you must use proper lock out/tag out procedures.
9. DO NOT distract staff members while they are operating or repairing equipment.

**Air Compressor Operation:**

1. Never direct compressed air towards a person.
2. When compressed air is used for cleaning purposes, the pressure must be regulated to no more than 40 PSI.
3. The PSI must be reduced to a maximum of 10 PSI if employees use compressed air to clean off clothing.
4. DO NOT use compressed air to clean up or move combustibles that might be suspended in the air causing a fire or explosion hazard.
5. Change the air filters on the intake regularly and keep compressor lubricated per manufacturer’s recommendations if properly trained to do so.

**Bench Grinder, Belt Sander, and Abrasive Cut-off Saw Operation:**

1. Wear eye protection and as needed, use a face shield.
2. Wear a respirator during the buffing operation when the dust is more prevalent.
3. Keep the face shield of the grinder on when using the bench grinder.
4. Keep the distance between the support rest and the face of the grinding wheel at 1/8 of an inch. Maintain guard coverage over the grinding wheel to 75%.
5. Always shut the power off the abrasive saw before placing material to be cut under the saw.
6. Never hold material to be abrasive sawed with the hands. Securely clamp the material to the saw table.

**Custodial Duties:**

1. Custodial closets or storage areas shall be kept clean and free of clutter.
2. Replace all container lids after use to prevent spills.
3. Use back injury prevention techniques when sweeping, mopping, or vacuuming.
4. DO NOT leave cleaning supplies and equipment out in an area that could cause accidents or injuries.
5. Use gloves when using cleaning liquids.
6. MSDS sheets must be on file for all cleaning chemicals used.
7. Never mix cleaning chemicals together as chemical reactions can cause injuries or even death.

**Vehicle Operation:**

1. Seat belts shall be worn while operating any vehicle where they are provided.
2. Employees shall not exceed the speed limit or use excessive speed for prevailing conditions.
3. Employees will practice defensive driving techniques.
4. Alcoholic beverages and intoxicating substances are forbidden prior to or during operating any vehicle.
5. Vehicles shall be parked in a well-lighted area and locked to discourage criminal activities.
6. Employees will follow all laws while operating company vehicles.
7. Only licensed drivers will be allowed to operate company vehicles.

**Office work:**

1. At computer workstations, background and screen lighting shall be adjustable.
2. Chairs shall be adjustable
3. Computer screens shall be adjustable.
4. Keyboards shall be adjustable.
5. Workplaces should be kept free of debris, floor storage and electrical cords.
6. Adequate aisle space shall be maintained at all times.
7. Open file cabinets one drawer at a time to prevent tipping hazards.
8. Use care when opening and closing file cabinet drawers to avoid pinching fingers.
9. Use caution when carrying loads, avoiding overexertion and strains.
10. Avoid leaning backwards in chairs, preventing injuries from fall or spill.
11. Employees should seek eye care to determine in glasses are needed for safe screen viewing
12. Use rest periods to relax eyes and body. These periods should be taken a minimum of every hour while operating at the computer station.

**Copy Machine Operation:**

1. Read all warning signs on machine before operating.
2. Be aware of pinch points on machine.
3. DO NOT smoke around duplicator, flammable liquids are used in the operation of this machine.
4. All guards must be in place before operating machine.
5. Use proper personal protective equipment when cleaning or servicing machine.
6. A MSDS sheet for each hazardous chemical used in the machine must be on file.

**Section 6: Guest Services**

1. When coming out of doorways, always exit with caution to avoid collision with others.
2. Always be aware of your surroundings.
3. Never argue or raise your voice to a customer.
4. If a customer is being difficult, violent, or is harassing you call for another employee or law enforcement for assistance

**Section 7: Hazardous Materials Emergencies/Chemical Spills**

1. Despite all safety precautions, it is possible that an accident could create annoying or hazardous conditions for those people in close proximity to a Hazardous Materials or Chemical Spill.
2. If there is a hazardous materials or chemical spill on District property follow these procedures:
	1. Note the exact location of the spill
	2. Do not leave this site unattended unless absolutely necessary.
	3. What is the nature of the emergency (examples: sewage spill, fuel spill, unknown chemical spill, accidental mixing of two chemicals.)
	4. If possible identify what chemical or hazardous waste is present.
	5. Follow clean-up precautions as found in the MSDS sheets.
		1. If spill is too large to handle or involves volatile substances like fuels, you will need to contact the local fire department, poison control center, or both.
		2. If a spill of this nature is found the District Board will be immediately notified of the situation.
3. Keep the area of the spill/accident clear of bystanders.
4. Do not try to clean up a spill if you have no information from the MSDS or local authorities as you could unknowingly cause more harm to yourself or others.
5. If the spill can cause harm to others an immediate notification of persons in the affected area must be made, to include precautions they must take, evacuations orders if necessary, and how to obtain further information on the incident.
6. A record of any hazardous material or chemical spill must be kept on file no matter the size for a minimum of 5 years as per OSHA regulations. OSHA must be notified of an incident if it causes harm to more than 2 persons or creates a need for quarantine or hospitalization of any persons.

**Section 8: First Aid**

1. In case of a first aid emergency always know the location of the closest first aid kit.
2. A first aid kit will be kept with any company vehicle, office or building where an emergency may occur.
3. DO NOT administer first aid treatment unless you are qualified to do so.
4. In the event that an injury consists of head injuries, possible neck or back injuries, or circumstances where the person is found unconscious immediately notify EMS.
5. In the event of any emergency where more than basic first aid is required immediately notify EMS.
6. If you must perform CPR follow your training, and stop only if:
	1. You are relieved by a person with the same certification or above.
	2. The scene becomes too dangerous to continue in.
	3. You are the only responder and you become too tired to continue.
7. If you are not comfortable administering aid to a person keep them as comfortable as possible until further help can arrive.
8. In regards to seizures;
	1. Never try to hold a person having a seizure down, as this can cause harm to them and you.
	2. Never try to place anything in a seizure patient’s mouth.
	3. Clear the area and try to keep subject from hurting themselves on objects that cannot be moved.
	4. After a seizure has run its course, lay the victim on their side and check for signs of breathing. If none present begin CPR is trained and comfortable.
	5. If a seizure patient does not regain consciousness after a few minutes, begins seizing again, has hit their head during a seizure, or has stopped breathing immediately notify EMS.